DOCKET NO.: JANS-0038 PATENT

Application No.: 10/752,057

Office Action Dated: September 5, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application. Listing of Claims:

- 1-14. (Cancelled).
- 15. (Previously presented) A triterpene saponin prepared by a process for the isolation of triterpene saponins belonging to the family *Myrsinaceae*, wherein said saponin is isolated from the plant species *Maesa balansae*, said process comprising
- (a) extracting dried plant parts with an alcohol and concentrating the extract,
- (b) removing the apolar fraction from the extract by liquid-liquid extraction with an apolar solvent, and
- (c) further purifying the saponin in the alcohol extract by liquid -liquid extraction, filtration and chromatography, wherein the chromatography comprises reversed-phase liquid chromatography with gradient eluent system using

A: 0.5 % ammonium acetate in water

B: methanol

C: acetonitrile

wherein at t = 0, (A:B:C) = (60:20:20) and at t = end, (A:B:C) = (0:50:50), and wherein said saponin has the following characteristics:

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Compound 1: MW = 1532, \lambda_{\text{max}} = 228.6 \text{ nm}, \lambda_{\text{max}2} = 273.3 \text{ nm};
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Compound 2: MW = 1510, $\lambda_{max} = 223.9 \text{ nm}$, $\lambda_{max2} = 274.5 \text{ nm}$;

Compound 3: MW = 1532, $\lambda_{\text{max}} = 279.2 \text{ nm}$, $\lambda_{\text{max}2} = 223.9 \text{ nm}$;

Compound 4: MW = 1510, $\lambda_{max} = 280.4 \text{ nm}$, $\lambda_{max2} = 222.7 \text{ nm}$;

Compound 5: MW = 1574, $\lambda_{max} = 276.8 \text{ nm}$, $\lambda_{max2} = 225.0 \text{ nm}$; or

Compound 6: MW = 1552, $\lambda_{max} = 279.2 \text{ nm}$, $\lambda_{max2} = 223.9 \text{ nm}$.

- 16. (Previously presented) The triterpene saponin according to claim 15 wherein the alcohol is methanol, ethanol, isopropanol, or butanol, each optionally admixed with water.
- 17. (Currently amended) A process according to claim 15 wherein the saponins of the alcohol extract are further purified by

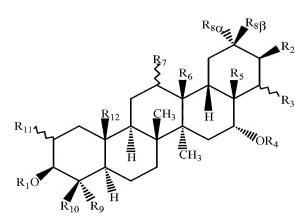
DOCKET NO.: JANS-0038 PATENT

Application No.: 10/752,057

Office Action Dated: September 5, 2006

(c6) extracting the aqueous fraction with butanol saturated with water,

- (e7) evaporating the organic layer to dryness,
- (e8) washing the residue in a ketone, and
- (c9) filtering off the crude saponin mixture.
- 18. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable excipient and as an active ingredient a triterpene saponin according to claim 15.
- 19. (Previously presented) A method of alleviating clinical manifestations of, and treating disorders known as leishmaniases attributable to infection by protozoan parasites of the genus *Leishmania* in both humans and animals, comprising administering to an infected host a therapeutically effective amount of a compound of formula:



a stereoisomeric form thereof or a pharmaceutically acceptable addition salt thereof, wherein R_1 is hydrogen, $-(C=O)C_{1-5}$ alkyl, $-(C=O)C_{2-5}$ alkenyl, $-(C=O)C_{2-5}$ alkenyl substituted with phenyl, a monosaccharide group or an oligosaccharide group;

 $R_2 \ is \ hydrogen, \ hydroxy, \ -O(C=O)C_{1-5}alkyl, \ -O(C=O)C_{2-5}alkenyl, \ -O(C=O)C_6H_5, \ or \\ -O(C=O)C_{2-5}alkenyl \ substituted \ with \ phenyl \ ;$

 R_3 is hydrogen, hydroxy, $-O(C=O)C_{1-5}$ alkyl, $-O(C=O)C_{2-5}$ alkenyl, $-O(C=O)C_6H_5$, or $-O(C=O)C_{2-5}$ alkenyl substituted with phenyl;

 $R_4 \ is \ hydrogen, \ C_{1\text{--}6}alkyl, \ \text{-}(C=O)C_{1\text{--}5}alkyl, \ \text{-}(C=O)C_{2\text{--}5}alkenyl, \ \text{-}(C=O)C_6H_5, \ or \ \text{-}(C=O)C_{2\text{--}5}alkenyl \ substituted \ with \ phenyl \ ;$

 R_5 is $CH_3, CH_2OH, CH_2OCH_3, CH_2O-C (= O)CH_3, CHO, or COOH ; or$

PATENT

DOCKET NO.: JANS-0038 **Application No.:** 10/752,057

Office Action Dated: September 5, 2006

 R_5 and R_2 form a divalent radical of formula -C(=O)-O-;

R₆ and R₇ are hydrogen; or taken together they form a bond; or R₅ and R₆ form a divalent radical of formula

 $-CH_2-O-$ (a),

-CH(OR₁₃)-O- (b), or

-C(=O)-O- (c),

wherein R₁₃ is hydrogen, C₁₋₆alkyl or -(C=O)C₁₋₅alkyl;

R_{8α} and R_{8β} each independently represent CH₃, CH₂OH, CH₂OCH₃, CH₂O-C(=O) C₁₋₅alkyl,

CHO, CH(OCH₃)₂, CH=NOH, or COOH $\frac{1}{2}$ or R_{8 β} and R₃ form a divalent radical of

formula -C(=O)-O- \(\frac{1}{2}\) or R_{8\beta\} and R₅ form a divalent radical of formula -CH₂O-CHOH-;

R₉ is CH₃, CH₂OH, CH₂OCH₃, CH₂O-C(=O)C₁₋₅alkyl, CHO, or COOH;

R₁₀ is CH₃, CH₂OH, CH₂OCH₃, CH₂O-C(=O)C₁₋₅alkyl, CHO, or COOH;

 R_{11} is hydrogen, hydroxy or O-C(=O)C₁₋₅alkyl; or R_{10} and R_{11} form a divalent radical of formula -CH₂O-; and

R₁₂ is CH₃, CH₂OH, CH₂OCH₃, CH₂O-C(=O)CH₃, CHO, CH=NOH, or COOH.

20. (Previously presented) The method according to claim 19 wherein

R₁ is hydrogen, -(C=O)C₁₋₅alkyl, or an oligosaccharide group;

R₃ is hydrogen, hydroxy, -O(C=O)C₁₋₅alkyl, -O(C=O)C₂₋₅alkenyl, or

-O(C=O)C₂₋₅alkenyl substituted with phenyl;

 R_4 is hydrogen, C_{1-6} alkyl, $-(C=O)C_{1-5}$ alkyl, or $-(C=O)C_{2-5}$ alkenyl;

R₅ is CH₂OH, CH₂O-C(=O)CH₃, or CHO; and

R₆ and R₇ taken together form a bond; or

R₅ and R₆ form a divalent radical of formula

-CH₂-O- (a),

-CH(OR₁₃)-O- (b), or

-C(=O)-O- (c),

wherein R₁₃ is hydrogen, C₁₋₆alkyl or -(C=O)C₁₋₅alkyl, ; and

R₇ is hydrogen;

R_{8β} represents CH₃, CH₂OH, CHO, CH(OCH₃)₂, CH=NOH, or COOH;

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DOCKET NO.: JANS-0038
Application No.: 10/752,057
Office Action Dated: September 5, 2006
R_{8\alpha} represents CH_3;
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 R_{8B} and R_3 form a divalent radical of formula -C(=O)-O-; or

R₈₈ and R₅ form a divalent radical of formula -CH₂O-CHOH-;

 R_{10} is CH_3 , CH_2OH ;

 R_{11} is hydrogen, hydroxy or O-C(=O) C_{1-5} alkyl; or

R₁₀ and R₁₁ form a divalent radical of formula -CH₂O-; and

 R_{12} is CH_3 , CH_2OH , $CH_2O-C(=O)CH_3$, CHO, or CH=NOH.

21. (Previously presented) The method according to claim 20 wherein

R₁ is hydrogen or an oligosaccharide group;

 R_2 is hydrogen, hydroxy, $-O(C=O)C_{1-5}$ alkyl, $-O(C=O)C_{2-5}$ alkenyl, $-O(C=O)C_6H_5$, or -

O(C=O)C₂₋₅alkenyl substituted with phenyl;

R₃ is hydrogen, hydroxy, -O(C=O)C₁₋₅alkyl, -O(C=O)C₂₋₅alkenyl, or

-O(C=O)C₂₋₅alkenyl substituted with phenyl;

 R_4 is hydrogen, C_{1-6} alkyl, $-(C=O)C_{1-5}$ alkyl, $-(C=O)C_{2-5}$ alkenyl, or $-(C=O)C_{2-5}$ alkenyl substituted with phenyl;

R₅ is CH₂OH, CH₂OCH₃, CH₂O-C(=O)CH₃, CHO, or COOH; and

R₆ and R₇ taken together form a bond; or

R₅ and R₆ form a divalent radical of formula

-CH₂-O-(a),

-CH(OR₁₃)-O-(b), or

-C(=O)-O-(c),

wherein R₁₃ is hydrogen; and

R₇ is hydrogen;

 $R_{8\alpha}$ and $R_{8\beta}$ both represent CH_3 ;

R₉ is CH₃;

 R_{10} is CH_3 ;

R₁₁ is hydrogen; and

 R_{12} is CH_3 .